

HAWAIIAN HOME LANDS HAWAIIAN HOMES COMMISSION

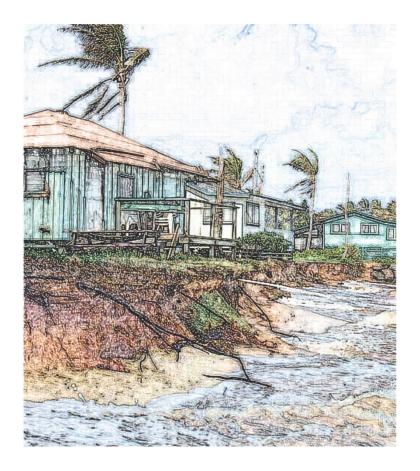
DEPARTMENT OF HAWAIIAN HOME LANDS

Item G-3 Molokai Planning Projects Status South Molokai Shoreline Erosion Management Plan, Phase I Kapa'akea & Kamiloloa-One Ali'i Homestead Areas

Background

| 2013-2014 | Planning Liaison/CZM Planner responded to requests from Molokai District Office to |
|-----------|--|
| | evaluate increasing incidents of shoreline erosion in Kapa'akea & Kalama'ula |
| May 2015 | UH-DURP Practicum Report, "Coastal Resilience for DHHL Communities" |
| Aug. 2015 | Molokai Coastal Homestead Resilience & Disaster Planning Workshop |
| 2016 | Funding approved by HHC for "Kapa'akea- Kamiloloa Shoreline Erosion Assessment" |
| July 2018 | Contract with PCH for "South Molokai Shoreline Erosion Management Plan" starts |

Coastal Resilience for DHHL Communities



A resource for the Department of Hawaiian Home Lands and its beneficiaries

Information to help officials and residents assess coastal hazards, enhance beneficiaries' disaster-readiness, improve management of the resource, and clarify jurisdictional issues.

Prepared by the Department of Urban and Regional Planning's Spring 2015 Practicum Team, University of Hawai'i at Mānoa

May 2015 Honolulu, Hawai'i





South Molokai Shoreline Erosion Management Plan (SM-SEMP)

Purpose of the project is to prepare a SEMP for the project area that will:

- Enable DHHL to proactively plan for and manage shoreline erosion;
- Investigate underlying causes of shoreline erosion, and likely future progression
- Identify effective and sustainable shoreline erosion management strategies that maintain natural processes and consider community needs; and
- **Educate the community as to the causes of shoreline erosion and appropriate management responses.**
- Purpose <u>IS NOT</u> to develop a relocation or managed retreat plan

Molokai Island Plan - LUD's

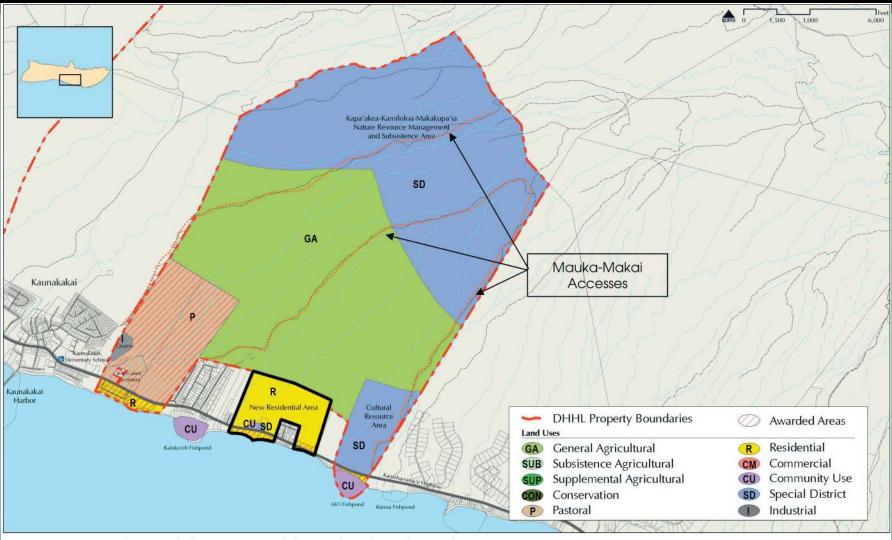


Figure 4.2 - Kapa'akea, Makakupa'ia, Kamiloloa Preferred Land Use Plan

Kapa'akea, Kamiloloa and Makakupa'ia - Residential homestead lots along the shoreline







SM-SEMP Project Key Tasks

| Literature research and desktop analysis | Aug. 2018 – Feb. 2019 |
|--|------------------------|
| Field surveys of the project area Unmanned aerial systems (UAV) technology used to survey the coastline the week of November 1 | Nov. 2018 – Feb. 2019 |
| Community engagement ♦ Stakeholder/beneficiary interviews ♦ Orientation meeting ♦ Community open house ♦ Hawaiian Homes Commission meeting briefings | Nov. 2018 – April 2020 |
| Data assessment | May – Sept. 2019 |
| Shoreline Erosion Management Plan preparation | Oct. 2019 – Apr. 2020 |

SM-SEMP Project

Planning Process

Phase

1. SCOPING

2. PLAN PREPARATION

Task

Research & Desktop Analysis

Field Surveys Agency Consultation

Community Engagement

Data Assessment Prepare
Management
—— Plan

Subtask

Identify Project Area Entitlements

Identify Applicable Policy and Regulatory Requirements

Synthesize Findings from the Literature Search Identify Erosion Hotspots

Identify Factors Contributing to Erosion

Identify and Describe Coastal Resources

Evaluate Resources at Risk from Erosion

Photograph the Project Area Conduct:

Orientation Meeting

Stakeholder Interviews

Agency Meetings

Community Open House

Hawaiian Homes Commission Meeting Assess Shoreline Change

Conduct a
Preliminary
Evaluation of
Coastal
Hydrodynamics

Assess Anthropogenic Changes

List Data and Information Gap

Prepare the Draft, Prefinal and Final Plan

Background, purpose and Methodology

Key Findings from the Scoping Process

Management Strategies Soft and Hybrid

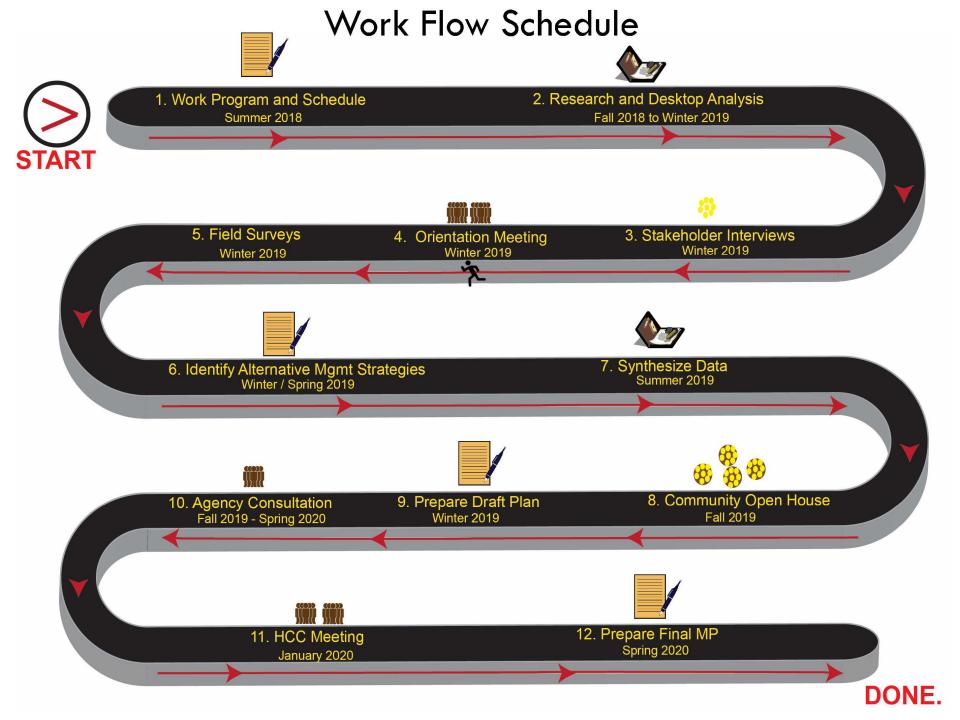
Techniques Policy Approaches

Implementation Order-of-Magnitude Costs

Likely Permit Requirements & Schedule

SM-SEMP Project Community Engagement

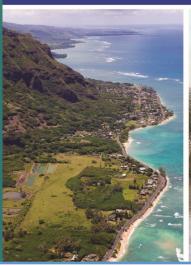
| Conduct Key Stakeholder Interviews (homestead lessees living along the shoreline, cultural practitioners with Traditional Ecological Knowledge (TEK), appropriate State and County personnel, and adjacent land managers) | Jan. 30-Feb. 1, 2019 |
|---|--|
| Project Orientation Meeting | Jan. 31, 2019 |
| Community Open House Meeting | late Sept./early Oct. 2019 |
| Hawaiian Homes Commission Meeting briefings | April 2019 and April 2020, others as needed |
| Shoreline Erosion Management Plan preparation | Oct. 2019 – Apr. 2020 |



Ongoing DHHL Climate Change & SLR Adaptation Efforts

- ➤ Most recent PO update for HHC in June 2018 was Item G-4, "Update on DHHL Efforts in the Areas of Climate Change and Sea Level Rise Adaption, Community Resilience and Hazard Mitigation on Hawaiian Home Lands, Statewide" (Exhibit 'C')
- ➤ In 2017, State Climate Change Mitigation & Adaptation Commission (DHHL Chairman is a member) issued "Hawaii Sea Level Rise Vulnerability & Adaptation Report"; next meeting is April 24









 $http://climate.hawaii.gov/wp-content/uploads/2019/02/SLR-Report_Dec2017-with-updated-disclaimer.pdf$

















Potential chronic flooding of the Kalama'ula Hawaiian Home Lands on Moloka'i (pink hatched area) in the SLR-XA (blue) with 3.2 feet of sea level rise

Moloka'i Hazard | Sea Level Rise Exposure Area | Impact | Chronic Flooding | Scenario | 3.2 and 5 feet of Sea Level Rise | Area of chronic flooding from SLR-XA with 3.2 feet of Sea level rise based on passive flooding. Potential additional area of chronic flooding based on NOAA passive flooding with 5 feet of sea level rise. Kaunakakai Crédits: Composite of modeled hazards developed and mapped by NOAA and Tetra Tech. Inc. show protable without protable in the sea prosect in applying the data presented, the sure retains the responsibility to undestand the cordinance miserals and potential sources of error in the data and developed. Source: Earn Digitaticie. Georgie, Earniar Georgiebes, Discharges (Durson) and the Gibb Lordon and the Gronz of the Commonly of the Commonly of the Gibb Lordon and the Gronz of the Commonly of

SLR-XA Maps

Figure 84. Potential additional area of chronic flooding with 5 feet of sea level rise in Kaunakakai, Kekaha, and Kapa'akea on Moloka'i

State-Level Initiatives State Climate Commission

- Act 32 signed by Governor Ige in 2016 implements elements of Paris Climate Accord
- ICAC has now become Hawai'i Climate Change Mitigation & Adaptation Commission
- Commission adopted Hawaii Sea Level Rise Vulnerability & Adaptation Report Dec. 2017
- HHC Chairman & PO staff actively participating in next phase – policy development via 2019 legislative initiatives, ORMP Implementation

Shoreline Erosion Management Next Steps

- Kapa'akea & Kamiloloa-One Ali'i SM-SEMP Project
 - Planning team is currently processing data from interviews and fieldwork
 - Next update to the community will be via a newsletter in June 2019
 - Next SM-SEMP Community Meeting/Open House will present Draft
 Plan and get feedback from beneficiaries in September/October 2019
- Preliminary Activities, Kalama'ula SEMP
 - Planning Office budget request for the next fiscal year will include a SEMP project for Kalama'ula
 - Planning Office will be contacting shoreline lessees to do initial interviews the third week of April 2019
- Community Resilience Planning Workshops –
 Summer/Fall 2020



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Questions?

Mahalo!